Readiness for Kindergarten 2022

A Continuation Study Conducted by the Mayor's Commission for Children Springfield, Missouri April 2023

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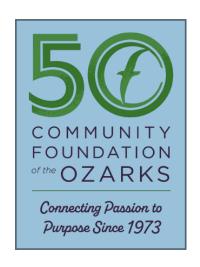


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INTRODUCTION

The Readiness for Kindergarten study was first conducted by the Mayor's Commission for Children in 2006 with the participation of nine area school districts. In 2010, the first follow-up study was conducted with four of the nine school districts from the initial study. Additional follow-up studies were conducted in 2014 and 2016 with three of the original area school districts: Springfield, Strafford, and Fair Grove. The 2018 and 2022 studies were conducted with the Springfield district only. An electronically administered survey was first employed in 2014 as were newer versions of the survey materials. The technical reports describing in detail the rationale, methodology and results may be viewed at the following website: https://www.springfieldmo.gov/794/Mayors-Commission-for-Children

The methodology employed in 2022 was largely consistent with that employed in 2014, 2016, and 2018. Teachers were administered online surveys containing items assessing general perceptions of the children in their class. The survey also contained 38 Devereux Early Childhood Assessment (DECA) questions to assess the children's social and emotional development. Although the prior version of the DECA (used in 2006 and 2010) contained only 37 items, many items were identical or similar allowing for meaningful comparisons. Teachers also reported demographic data and experiential data including DIAL-4 percentiles which reflect motor, language, and concept development and which allow for limited contrasts with the DIAL-3 percentiles supporting the earlier 2006 and 2010 reports. A copy of the survey (except for copyrighted materials) may be found in Appendix A.

The primary goal of the later studies (2014, 2016, 2018, and 2022) was to provide time-lag comparisons with the findings from the 2006 and 2010 research. Therefore, we maintained the original methodology with few exceptions. In 2018, we adjusted the method of obtaining a random sample of five kindergarten students from each classroom to ensure that the sample did not include children who were older than 5 years-of-age. Teachers were provided a randomly-ordered list of names of 5-year-old children in their classroom and were instructed to select the first five children on the list whose parents had provided consent to participate. The same procedure for selecting children was employed in 2022. One question concerning the highest level of education in the household that was present on previous surveys was not included in the 2022 survey due privacy concerns and lack of teacher access to the information.

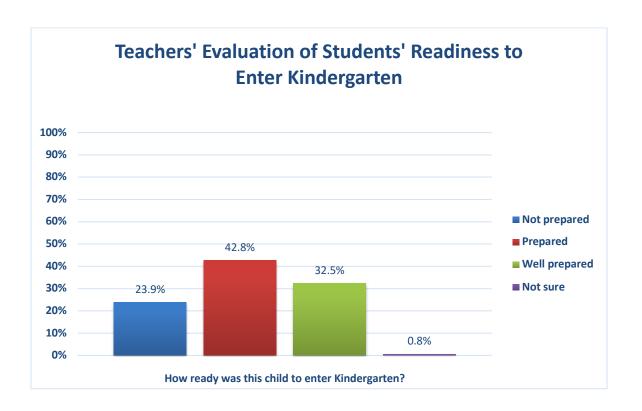
KINDERGARTEN READINESS 2022

Surveys were requested from 90 kindergarten teachers in the Springfield R-12 school district between October 1st and October 22nd. Data were not collected from teachers with fewer than 5 students in their classroom and online teachers. Out of the 90 teachers contacted, 81 (90%) responded and completed surveys for two or more children. A total of 360 surveys were completed for a response rate of 80% (calculations were based on a possible 5 surveys from 90 teachers).

FINDINGS FROM THE CURRENT SURVEY, OCTOBER 2022

In this section, 2022 kindergarten readiness is reported. Other factors that may impact kindergarten readiness such as free/reduced lunch status, attendance at a formal preschool program, gender, and teaching experience are examined.

Overall, how do teachers evaluate the kindergarten readiness of their students?

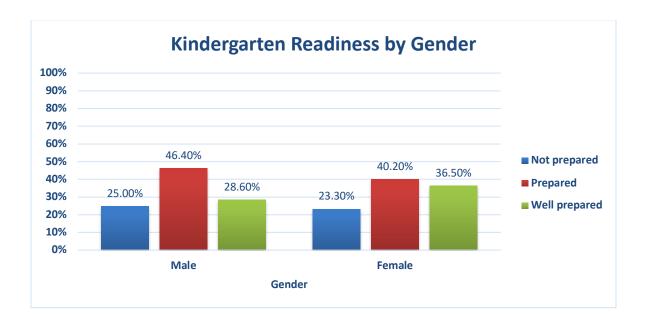


	Not prepared	Prepared	Well prepared	*Not Sure
N = 360	86 (23.9.0%)	154 (42.8%)	117 (32.5%)	3 (0.8%)

^{*}Data from the 3 students whose teachers answered "not sure" to the *readiness to enter kindergarten* question will not be included in analyses involving the *readiness to enter kindergarten* variable.

Is there a statistically significant relationship between gender and kindergarten readiness?

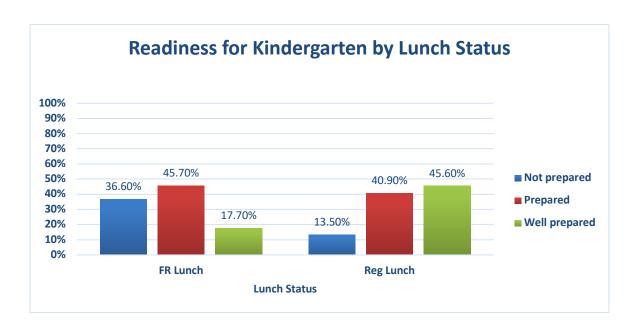
No. Teachers identified similar levels of preparedness for male and female students.



	Not prepared	Prepared	Well prepared
Male, $n = 168 (47.1\%)$	42 (25%)	78 (46.4%)	48 (28.6%)
Female, $n = 189 (52.9\%)$	44 (23.3%)	76 (40.2%)	69 (36.5%)

<u>Is there a statistically significant relationship between student SES and kindergarten readiness?</u>

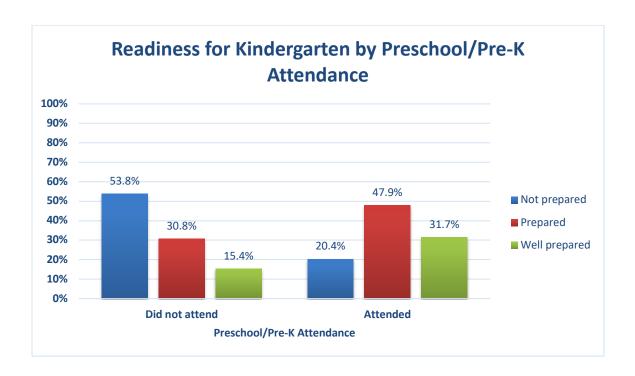
Yes. A higher proportion of students eligible for Free/Reduced lunch were described by their teachers as *not prepared* for kindergarten. And a higher proportion of students paying regular lunch prices were described as *well prepared* for kindergarten.



	Not prepared	Prepared	Well prepared
FR Lunch, $n = 164 (45.9\%)$	60 (36.6%)	75 (45.7%)	29 (17.7%)
Reg Lunch, $n = 193 (54.1\%)$	26 (13.5%)	79 (40.9%)	88 (45.6%)

<u>Is there a statistically significant relationship between attendance at a formal preschool program and kindergarten readiness?</u>

Yes. Students who did not attend a formal preschool program were disproportionately *not* prepared for kindergarten.

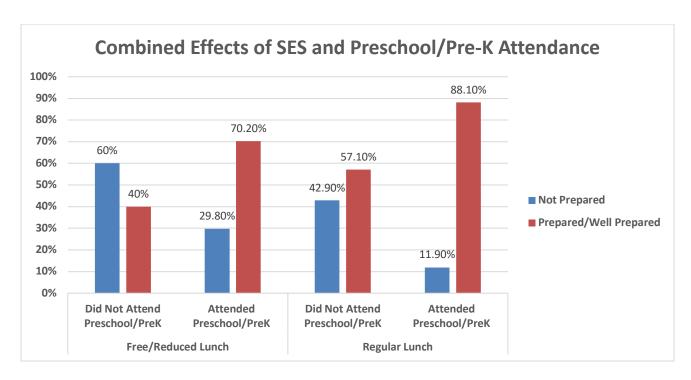


	Not prepared	Prepared	Well prepared
Did Not Attend, n = 39 (14%)	21 (53.8%)	12 (30.8%)	6 (15.4%)
Attended, $n = 240 (86\%)$	49 (20.4%)	115 (47.9%)	76 (31.7%)

What is the combined effect of formal preschool program attendance and SES on kindergarten readiness?

An additional analysis was conducted to examine the combined effect of formal preschool attendance and socioeconomic status on kindergarten readiness. For ease of interpretation, the well-prepared category was combined with the prepared category for a single comparison with the not prepared category.

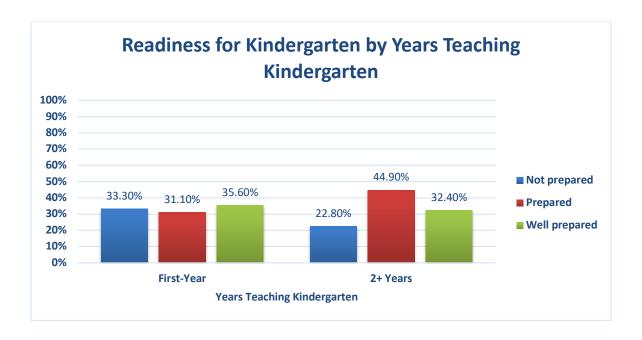
- A significantly higher proportion of children eligible for Free/Reduced lunch who did not attend preschool/pre-k were evaluated as *not prepared* for kindergarten by their teachers. Similarly, a lower proportion of these students were evaluated as *prepared/well prepared* for kindergarten.
- A significantly lower proportion of children paying regular lunch prices who attended preschool/pre-k were evaluated as *not prepared* by their teachers.



	Not prepared	Prepared/Well Prepared
Free/Reduced, n = 139 (49.8%)		
Did Not Attend, n = 25 (18%)	15 (60%)	10 (40%)
Attended, $n = 114 (82\%)$	34 (29.8%)	80 (70.2%)
Regular, $n = 140 (50.2\%)$		
Did Not Attend, n = 14 (10%)	6 (42.9%)	8 (57.1%)
Attended, $n = 126 (90\%)$	15 (11.9%)	111 (88.1%)

Are the readiness evaluations of first-year kindergarten teachers different from those of more experienced kindergarten teachers?

No. Readiness evaluations of the 11 first-year kindergarten teachers were not significantly different from the evaluations of the 70 teachers with more experience teaching kindergarten children.

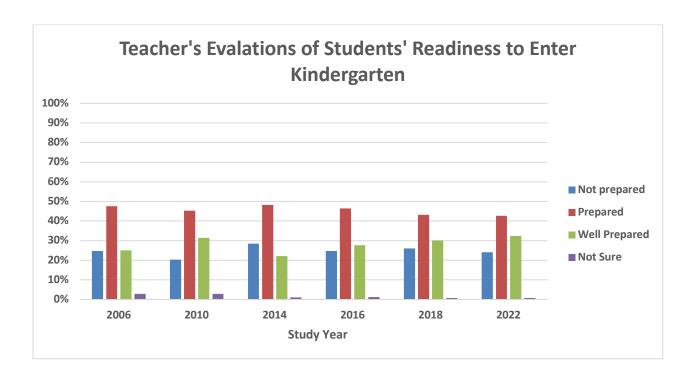


	Not prepared	Prepared	Well prepared
First-Year, $n = 45 (12.6\%)$	15 (33.3%)	14 (31.1%)	16 (35.6%)
2+ Years, n = 312 (87.4%)	71(22.8%)	140 (44.9%)	101 (32.4%)

Comparison of Data from 2006, 2010, 2014, 2016, 2018, 2022

Kindergarten Readiness by Study Year

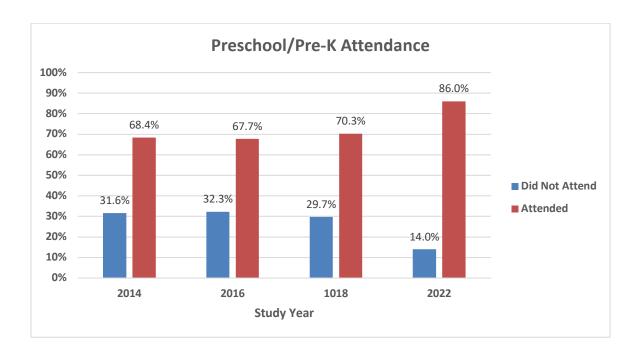
The percentage of students identified as *not prepared* for kindergarten in 2022 was similar (not significantly different) from any of the previous years.



	Not prepared	Prepared	Well Prepared	Not Sure	N
2022	86 (23.9.0%)	154 (42.8%)	117 (32.5%)	3 (0.8%)	360
2018	113 (26.0%)	188 (43.2%)	131 (30.1%)	3 (0.7%)	435
2016	77 (24.7%)	145 (46.5%)	86 (27.6%)	4 (1.3%)	312
2014	81 (28.5%)	137 (48.2%)	63 (22.2%)	3 (1.1%)	284
2010	78 (20.4%)	173 (45.3%)	120 (31.4%)	11 (2.9%)	382
2006	78 (24.7%)	150 (47.5%)	79 (25.0%)	9(2.8%)	316

Preschool and Pre-K Attendance by Study Year

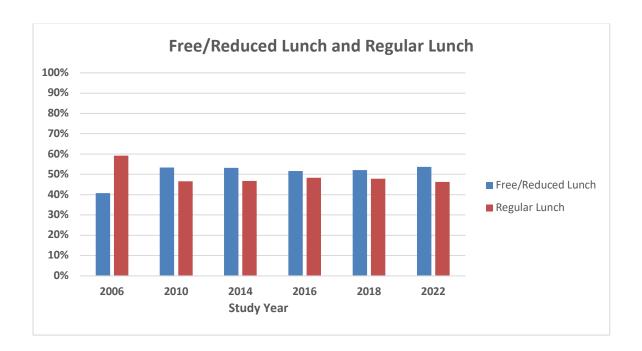
A comparison of the proportion of children attending and not attending preschool/pre-k in the four most recent study years indicates a statistically significant effect. Specifically, in 2022, the proportion of the study sample identified as having attended formal preschool was significantly higher than previous years.



	Did Not Attend	Attended	Total
2022	39 (14%)	240 (86%)	279
2018	88 (29.7%)	208 (70.3%)	296
2016	92 (32.3%)	193 (67.7%)	285
2014	85 (31.6%)	184 (68.4%)	269

Free and Reduced Lunch by Study Year

The percentage of students qualifying for Free or Reduced Lunch was significantly lower in 2006 than in all subsequent study years.



	Free/Reduced Lunch	Regular Lunch	Total
2022	166 (46.1%)	194 (53.9%)	360
2018	226 (52.1%)	208 (47.9%)	434
2016	142 (51.6%)	133 (48.4%)	275
2014	134 (53.2%)	118 (46.8%)	252
2010	203 (53.4%)	177 (46.6%)	380
2006	125 (40.8%)	181 (59.2%)	306

Items in common from the original (2006/2010) and revised (2014-2022) Devereux Early Childhood Assessment (DECA)

Higher scores on the Protective Factors items indicate positive developmental assets for the children that support social and emotional strengths. On the Protective Factors items common to the original DECA and the revised DECA, values in 2022 were similar to those found in all years with the exception of 2014. Protective factors scores were higher in 2022 than in 2014.

Higher scores on the Behavioral Concerns items indicate negative characteristics of children that restrict social and emotional wellbeing. Scores on the Behavioral Concerns items common to the original DECA and the revised DECA in 2022 were not significantly different from other years.

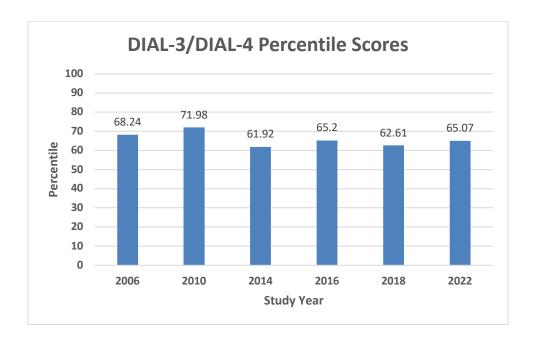
	Mean	Standard Deviation	N
2022			
Protective Factors items	74.51	15.45	360
Behavioral Concerns items	9.9	7.52	360
2018			
Protective Factors items	75.83	16.2	435
Behavioral Concerns items	10.42	7.52	435
2016			
Protective Factors items	71.99	14.98	312
Behavioral Concerns items	9.27	7.00	312
2014			
Protective Factors items	69.47	13.70	284
Behavioral Concerns items	9.96	7.38	284
2010			
Protective Factors items	75.58	17.14	367
Behavioral Concerns items	8.69	6.04	369
2006			
Protective Factors items	71.79	15.20	282
Behavioral Concerns items	9.56	6.13	310

Differences on DECA scores are small, suggesting that while statistical significance may be demonstrated, "practical significance" (i.e., the efficacy of findings for policy changes) is absent.

DIAL-3 (2006, 2010) and **DIAL-4** (2014-2022) Percentile Scores (Norm mean = 50)

Higher scores on the DIAL-3 and DIAL-4 indicate greater strengths in conceptual, language, and motor development.

DIAL-4 scores have been consistent over the past four study years (2014–2022). Statistically significant differences were found between the percentiles in 2022 and those in 2010. Like 2014, 2016, and 2018, DIAL percentiles in 2022 are significantly lower than those recorded in 2010. It is unknown if this is the result of different parameters of the newer vs. older versions of the DIAL, a true time-lag/cohort effect that may exist over these years or other specific reasons and combinations of reasons.



	Mean	Standard Deviation	N
2022	65.07	31.89	293
2018	62.61	31.39	371
2016	65.20	29.81	281
2014	61.92	31.88	252
2010	71.98	27.09	365
2006	68.24	26.54	302

Takeaways and Questions for Further Consideration

- More children are attending preschool and pre-k programs in Springfield.
- Pre-k is important for preparing children for kindergarten, but it is especially important for low-income students.
- Ratings of kindergarten readiness and DECA scores are comparable to data from previous study years. It is possible that the pandemic did not have the same impact on this kindergarten cohort as it had on older student cohorts.

For further information, contact Brigitte Marrs at the Mayor's Commission for Children (417)864-1656.

School Readiness Survey 2022

The survey below is divided into two parts. **Part 1** asks background questions about you and your kindergarten students in general. **Part 2** asks background questions about five randomly selected children in your classroom and contains the items from the Devereux Early Childhood Assessment.

If you need to stop in the middle of the surveys, you can leave and return as often as needed through your link provided in your email. If you lose the email with your link to the survey or run into any problems completing the surveys, please contact Melissa Fallone at 417-836-6528 or MFallone@missouristate.edu.

rait i
Teacher's last name:
How many kindergarten students are in your classroom?
How many of your students this year were <u>not</u> ready to enter Kindergarten and meet its challenges successfully?
How many years have you been teaching?
How many years teaching Kindergarten?

<u>Part 2</u> <u>Student Selection Instructions:</u> Please read these instructions before you begin selecting five students for the School Readiness Survey.

The following list contains the randomly ordered names of students eligible for the study based on their date of birth. Beginning with the first student on the list, check to see if you have received a signed consent form from the student's parent or legal guardian. If a signed consent form has not been returned, go to the next student on the list. Continue this process with the goal of identifying the first five students on the list with a signed consent form.

List of Students

Once you have identified five students, make a note of which students were selected or simply number the consent forms of the selected students from 1 to 5. This will be helpful, in the event that you complete surveys for one or more of the students at a later time.

Please use information provided in **eSchool** to answer the following questions about the **First** student selected.

Student SPS ID number:
Student Date of Birth (mm/dd/yy):
DIAL 4 percentile:
Student's gender: Male Female

- Lunch Lunch status:
- o Free/Reduced
- o Regular Price

What is this child's ethnicity?

- Hispanic or Latino
- Not Hispanic or Latino

What is this child's race? Mark one or more races to indicate what the child's parents or the child considers himself/herself to be.

- o American Indian or Alaska Native
- o Asian
- Black or African American
- o Native Hawaiian or Other Pacific Islander
- o White

Student lives with: (MARK ALL THAT APPLY) o Both parents o Father o Stepfather o Mother o Stepmother o Guardian
Now we would like to ask questions about the child's preschool experience and general readiness to attend Kindergarten.
What preschool program(s) did this child attend? MARK ALL THAT APPLY o Headstart o Title I o Faith based (enter name of program below)
o Private provider (enter name of program below)
 Other None Not known
How ready was this child to enter Kindergarten? o Not Prepared Prepared Well Prepared

Not Sure